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Russell E. Fowler II

Name of person mailing Document or Fee

Signature

October 5, 2006

Date of Signature

Re: Application of:

Moos et al.

Serial No.:

09/673,959

Filed:

December 28, 2000

For:

Method of Calling a Substation by a Central

Station in a Transmission System

Group Art Unit:

3665

Confirmation No.

8902

Examiner:

Ho, Duc Chi

MMB Docket No.:

1734-0001

TRANSMITTAL OF APPEAL BRIEF

Please find for filing in connection with the above patent application the following documents:

- 1. Appeal Brief (16 pages);
- 2. A Check in the amount of \$500.00; and
- 3. One (1) return post card.

Commissioner for Patents October 5, 2006 Page 2

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 13-0014.

Respectfully Submitted,

MAGINOT, MOORE & BECK

October 5, 2006

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Enclosures



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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2665

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BRIEF ON APPEAL

Commissioner:

This is an appeal under 37 CFR § 41.31 to the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office from the rejection of claims 8-21 of the aboveidentified patent application. Claims 8-21 were finally rejected in the Office Action dated January 20, 2006. A check in the amount of \$500.00 is enclosed herewith to cover the fee required under 37 CFR § 41.20(b)(2). Also, please provide any extension of time which may be

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necessary and charge any fees which may be due to Deposit Account No. 13-0014, but not to include any payment of issue fees.

I. REAL PARTY IN INTEREST

The real party in interest is Landis+Gyr AG, the assignee of record for the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences in this case.

III. STATUS OF CLAIMS

Claims 8-21 are pending in the application.

Claims 1-7 have been cancelled.

Claims 8-21 stand rejected and form the subject matter of this appeal. Claims 8-21 are shown in the Appendix attached to this Appeal Brief.

IV. STATUS OF AMENDMENTS

Appellant filed a Preliminary Amendment on October 20, 2000, cancelling claims 1-7 and adding new claims 8-21. No additional amendments have been filed in this case. Appellant received a final Office Action dated January 20, 2006 (the "Final Office Action") rejecting each of claims 8-21. Appellant has filed no additional amendments following receipt of the Final Office Action.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

An explanation of the subject matter defined in each of the independent claims involved in the appeal is provided below.

A. <u>Independent Claim 15</u>

Applicant's claimed invention, as set forth in independent claim 15, is directed to an arrangement for information transmission for remote reading of electricity meters over a communication system. The arrangement comprises a plurality of communication channels divided into communication groups (see, e.g., groups I, II and III of Fig. 1). The communication channels within a communication group (see, e.g., communication channels 1 ... n of GR II in Fig. 1) have the same communication properties (see, e.g., page 1b, lines 27-31 to page 2, lines 1-18 of the specification). A substation is associated with a first communication group (see, e.g., substation US_m in Fig. 1). A central station is coupled to the plurality of communication channels (see, e.g., central station Z in Fig. 1). The central station Z is operable to determine whether any communication channel of the first communication group is free (e.g., communication channel m of Fig. 1). Then, the central station is operable to acquire meter reading data over a free channel of the first communication group if it is determined that any communication channel of the first communication group is free. The central station continues to wait if it is determined that no communication channel of the first communication group is free. Fig. 2 describes this process of determining whether a communication channel is free, acquiring meter reading data over a free channel, and waiting if no communication channel of the first group is free (see page 2, lines 38-39 to page 3, lines 1-31 of the specification).

B. <u>Independent Claim 8</u>

Applicant's claimed invention, as set forth in independent claim 8, is directed to a method of calling a substation by a central station in a transmission system for the purposes of information transmission for remote reading of electricity meters by way of a communication channel selected from a plurality of communication channels. The plurality of communication channels are divided into communication groups (see, e.g., groups I, II and III of Fig. 1). The communication channels within a communication group have the same communication properties (see, e.g., page 1b, lines 27-31 to page 2, lines 1-18 of the specification). The method comprises first identifying a first communication group associated with a select substation to be called (see, e.g., group GR II and substation US_m of Fig. 1, as well as steps 10 and 11 of Fig. 2 as described on page 3, lines 21-23 of the specification). Next, it is determined whether any communication channel of the first communication group is free (see, e.g., step 12 of Fig. 2 and page 3, lines 21-27 of the specification). If it is determined that any communication channel of the first communication group is free, meter reading data is acquired over a free channel of the first communication group (see, e.g., step 14 of Fig. 2 and page 3, lines 27-29 of the specification). If it is determined that no communication channel of the first communication group is free, the method involves waiting and repeating the step of determining whether any communication channel of the first communication group is free (see, e.g., step 12 of Fig. 2 and page 3, lines 25-27).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 8-21 are unpatentable under 35 U.S.C. §103(a) as being obvious over Modell (i.e., "Application of Data Acquisition and Power Control to Regional and Central Control System", by D.J. Modell, Advances in Instrumentation and Control, Vol. 48, Part 02, 1993) in view of Yuji (i.e., Japanese patent application publication no. 10051473).

VII. ARGUMENT

Applicant respectfully submits that the rejection of claims 8-21 Under 35 U.S.C. § 103(a) as obvious to Modell in view of Yuji should be reversed, as the examiner has failed to make a prima facie case of obviousness under MPEP § 2143.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, all claim limitations must be taught or suggested by the prior art. As set forth below, the examiner has failed to meet these criteria.

A. There Must Be Some Suggestion or Motivation To Modify the References

In order to establish a *prima facie* case of obviousness, there must be some teaching, suggestion or motivation for modifying or combining the references found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. MPEP § 2143.01. "There are three possible sources for a motivation to combine references: the nature of the problems to be solved, the teachings of the prior art, and the

knowledge of persons of ordinary skill in the art." *Id., citing In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998).

In the present case, the source of the examiner's motivation to combine references appears to be the knowledge of persons of ordinary skill in the art. Specifically, in the Final Office Action, the examiner stated that, "One skill (sic) in the art would recognize the advantage of examining new approaches to control of Power Utility projects at unmanned locations by exploiting the latest connectability of the hardware and software for control in order to provide efficiency, savings in power utilization, and maintenance for a non-continuous operation." (See page 4 of the Final Office Action). Then the examiner set forth the following rationale for combining Modell and Yuji: "The suggestion/motivation for doing so [(i.e., combining Modell and Yuji)] would have been to provide efficiency, savings in power utilization, and maintenance for a non-continuous operation by implementing the features such as checking periodically the monitored data on shared channels or loops." (See page 4 of the Final Office Action).

Even for relatively simple inventive concepts, there must be some evidence or finding "as to the specific understanding or principle within the knowledge of the skilled artisan" that would have provided the motivation to combine references. *See In re Kotzab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); also see MPEP 2143.01 citing *In re Kotzab*. In the present case, the examiner has provided no evidence whatsoever of what one of ordinary skill in the electricity meter reading art might have known at the time of the invention. Furthermore, the examiner has cited no references suggesting that the arrangement of Yuji would be any more efficient or desirable than that of Modell for electricity meter reading. No documentary evidence has been provided, no implicit disclosure in any reference has been provided, and no official notice has been taken of any facts outside of the record. Instead, the examiner has only provided his

Applicant respectfully submits that such personal speculation by the examiner, without any more evidence, is insufficient to satisfy the examiner's obligation to establish a motivation to combine references. Absent a clear analysis with supporting rationale for combining references, the Examiner's conclusion that one of ordinary skill in the art would have found it obvious to combine the references is merely impermissible "hindsight." See In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998). Accordingly, for at least this reason, the Examiner has failed to make a prima facie case of obviousness, and the examiner's rejection of claims 8-21 under 35 U.S.C. § 103 should be reversed.

Another reason that the proposed combination of Modell and Yuji is improper is that the proposed combination would change the principle of operation of Modell. When a proposed modification or combination of the prior art changes the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *Id.*, *citing In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). In this case, Modell discloses a power station control system that includes three regional control centers (see Fig. 1 of Modell). Each regional control center can handle up to five loops. A maximum of five power stations are controlled at each loop. Modell is specifically configured with this arrangement in order to reduce overhead and maximize channel throughput (see page 1104 of Modell). By combining Modell with Yuji, as suggested by the examiner, Modell's principal of operation where each power station is controlled by a specific loop would have to change. Furthermore, as stated previously, the examiner has provided no objective evidence suggesting the desirability of changing Modell to include the teachings of Yuji. Because the examiner has offered no such evidence, and because proposed combination of Modell and Yuji

would change the principle of operation of Modell, the teachings of the references are not sufficient to render the claims *prima facie* obvious. Accordingly, for at least the above reasons, the examiner has provided an insufficient motivation to combine Modell and Yuji, and the examiner's rejection of claims 8-21 under 35 U.S.C. § 103 should be reversed.

B. There Must Be a Reasonable Expectation of Success

In going from the prior art to the claimed invention, one cannot base obviousness upon what a person skilled in the art might try or might find "obvious to try" but rather must consider what the prior art would have led a person skilled in the art to actually do. *See In re Tomlinson*, 150 USPQ 623 (CCPA 1966). Accordingly, to avoid the "obvious to try" allegation when making a *prima facie* of obviousness, the examiner must establish the existence of a reasonable expectation of success. MPEP § 2143.02. Such a reasonable expectation of success may be derived from the teachings of the prior art. *See, e.g., In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In the present case, the examiner has not cited any evidence to suggest a reasonable expectation of success. Instead, in the Final Office Action, the examiner merely provides the conclusory suggestion that combining Modell and Yuji will "provid[e] efficiency, savings in power utilization, and maintenance for a non-continuous operation by implementing features such as checking periodically the monitored data on shared channels instead of dedicated channels or loops." However, there is no suggestion in the art that the arrangement of Yuji would provide any efficiency, savings in power, or maintenance advantages over Modell. Accordingly, the examiner has provided no evidence of any reasonable expectation of success for the proposed combination of Modell and Yuji. Without evidence of a reasonable expectation

of success, the proposed combination by the examiner is no more than an impermissible "obvious to try" argument. Accordingly, it is respectfully submitted that the examiner has not made a *prima facie* case of obviousness, as the examiner has not shown a reasonable expectation of success for the combination of Modell and Yuji, and the examiner's rejection of claims 8-21 under 35 U.S.C. § 103 should be reversed.

C. All Limitations of the Independent Claims Are Not Taught or Suggested By the Prior Art

In order for the examiner to make a *prima facie* case of obviousness under MPEP § 2143.03, all claim limitations must be taught or suggested by the prior art. In the present case applicant respectfully submits that the examiner has not established a *prima facie* case of obviousness, as all limitations of independent claims 8 and 15 are not taught or suggested by the prior art.

As an example of the above, neither Modell nor Yuji disclose the limitation of "a plurality of communication channels divided into communication groups, wherein the communication channels within the communication groups have the same communication properties" (emphasis added), as set forth in claim 15. Similar language is also found in claim 8. In the Final Office Action, the examiner argues that Modell discloses this limitation, stating that "the loops or channels [of Modell] are for control or data acquisition." However, the idea that the loops of Modell have the same purpose does not equate to a disclosure that the loops have the same communication properties. If the loops in each group of Modell had the same communication properties they could be used interchangeably with the other power generating stations in the group. However, this is not disclosed in Modell. The examiner makes no

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argument that Yuji discloses this limitation. Indeed, Yuji could not disclose this limitation since there is no disclosure of "communication groups" in Yuji. Accordingly, because neither Modell nor Yuji disclose "a plurality of communication channels divided into communication groups, wherein the communication channels within the communication groups have the same communication properties," all limitations of claim 15 are not disclosed by the cited art. Therefore, it is respectfully submitted that the examiner has not made a *prima facie* case of obviousness, and the examiner's rejection of claims 8-21 under 35 U.S.C. § 103(a) should be reversed.

VIII. CONCLUSION

For all of the foregoing reasons, claims 8-21 are not unpatentable. As a consequence, the Board of Appeals is respectfully requested to reverse the rejection of these claims under 35 U.S.C. § 103(a).

Respectfully submitted,

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Enclosure

CLAIM APPENDIX

- 8. A method of calling a substation by a central station in a transmission system for the purposes of information transmission for remote reading of electricity meters by way of a communication channel selected from a plurality of communication channels, wherein the plurality of communication channels are divided into communication groups, wherein the communication channels within a communication group have the same communication properties, the method comprising:
- a) identifying a first communication group associated with a select substation to be called;
- b) determining whether any communication channel of the first communication group is free;
- c) acquire meter reading data over a free channel of the first communication group if it is determined that any communication channel of the first communication group is free; and
- d) waiting and repeating step b if it is determined that no communication channel of the first communication group is free.
- 9. The method of claim 8 wherein each of the communication groups is associated with a specific code word, the specific code word representative of a memory address.
- 10. The method of claim 8 wherein step c) further comprises storing an item of busy information for the free channel.

- 11. The method of claim 10 wherein storing the item of busy information for the free channel comprises setting a flag.
- 12. The method of claim 10 wherein storing the item of busy information comprises storing a code word which is stored in a memory of the central station.
- 13. The method of claim 10 wherein storing the item of busy information comprises storing the item of busy information in an operating system located in the central station.
- 14. The method of claim 10 wherein storing the item of busy information comprises storing the item of busy information in an application software located in the central station.

15. An arrangement for information transmission for remote reading of electricity meters over a communication system, the arrangement comprising:

a plurality of communication channels divided into communication groups, wherein the communication channels within a communication group have the same communication properties,

a substation associated with a first communication group;

a central station coupled to the plurality of communication channels, the central station operable to

- a) determine whether any communication channel of the first communication group is free,
- b) acquire meter reading data over a free channel of the first communication group if it is determined that any communication channel of the first communication group is free, and
- c) waiting and repeating the step c if it is determined that no communication channel of the first communication group is free.
- 16. The arrangement of claim 15 wherein the central station is further operable to associate each of the communication groups with a specific code word, the specific code word representative of a memory address.
- 17. The arrangement of claim 15 wherein the central station is further operable to store an item of busy information for the free channel.

- 18. The arrangement of claim 17 wherein the central station is further operable to store the item of busy information for the free channel by setting a flag.
- 19. The arrangement of claim 17 wherein the central station is further operable to store the item of busy information by storing a code word which is stored in a memory of the central station.
- 20. The arrangement of claim 17 wherein the central station is further operable to store the item of busy information by storing the item of busy information in an operating system located in the central station.
- 21. The arrangement of claim 17 wherein the central station is further operable to store the item of busy information in an application software located in the central station.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None